

GENKEL', P.A.

SABININ, D.A.; GENKEL', P.A., professor; KURSANOV, A.L., akademik, redaktor; NICHIPAROVICH, A.A., professor, redaktor; KOLOSOV, I.I., doktor biologicheskikh nauk, redaktor; TRUBETSKOVA, O.M. kandidat biologicheskikh nauk, redaktor; SAMYGIN, G.A., redaktor; ZELENIKOVA, Ye.V., tekhnicheskii redaktor;

[Physiological principles of plant nutrition] *Fiziologicheskie osnovy pitaniia rastenii*. Moskva, Izd-vo Akademii nauk SSSR, 1955. 512 p. (MLRA 8:8)
(Plants--Nutrition)

GENKEL', P.A.; BOHRITSKAYA, M.A.; TSVETKOVA, I.V.

Effect of T.S.Mal'tsev's tillage methods on certain physiological characteristics of spring wheat. *Fiziol.rast.* 2 no.1:42-51 Ja-F '55. (MLRA 8:9)

1. Institut fiziologii rasteniy imeni K.A.Timiryazeva i Pochvennyy institut imeni V.V.Dokuchayeva Akademii nauk SSSR, Moscow.
(Wheat) (Tillage)

GENREL', P.A.; AZIZBEKOWA, Z.S.

Results of a large-scale practical experiment with the method
for inducing greater salt resistance in cotton. *Fiziol.rast.*
2 no.1:90-92 Ja-F '55. (MLRA 8:9)

1. Institut fiziologii rasteniy imeni K.A.Tsimiryasova Akademii
nauk SSSR, Moscow, i Institut botaniki Akademii nauk Azerb.SSR,
Baku. (Cotton)

GENREL', P.A.; NOVOSILOVA, A.N.

Analysis of the drought resistance of spring wheat. Fisiol.rast.
2 no.3:199-208 My-Je '55. (MLRA 8:11)

1. Institut fiziologii rasteniy imeni K.A.Timiryazeva Akademii
nauk SSSR, Moscow.

(Wheat--Water requirements)

GENKEL', P.A.; SARYCHEVA, A.P.; SITNIKOVA, O.A.

Effect of variable temperature seed treatment on corn development and ripening. Fisiol.rast. 2 no.5:447-453 S-O '55. (MLRA 9:2)

1.Kafedra botaniki Moskovskogo oblastnogo pedagogicheskogo instituta.

(Corn (Maize)) (Plants, Effect of temperature on)

SHOSTAKOVSKIY, S. A.

"Botany": Textbook for teachers institutes. P.A. Genkel',
L.V. Kudriashov. Reviewed by S.A. Shostakovskii. Bot. Zhur.
40 no. 3: 439-442 My-Je '55. (MLA 8:10)
(Genkel', Pavel Aleksandrovich) (Kudriashov, L.V.) (Botany)

GENKEL, P. A.

USSR/Biology - Plant physiology

Card 1/1 Pub. 22 - 51/59

Authors : Genkel', P. A., and Tsvetkova, I. V.

Title :
Increase in heat resistance of plants

Periodical : Dok. AN SSSR 102/2, 383-386, May 11, 1955

Abstract : Various means are discussed for increasing the heat resistance of various annual and perennial plants. Five USSR references (1924-1951). Tables.

Institution : Acad. of So., USSR, Inst. of Plant Physiol. im. K. A. Timiryazev

Presented by: Academician A. L. Kursanov, February 14, 1955

OKNINA, Ye.Z.; BARSKAYA, Ye.I.; ~~GENKEL~~ P.A., otvetstvennyy redaktor;
MAKAROVA, O.V., redaktor izdatel'stva; PAVLOVSKIY, A.A., tekhnicheskiiy redaktor

[Practical manual for determining the planting readiness of stratified seeds of the principal fruits] Prakticheskoe rukovodstvo po opredeleniiu gotovnosti semian osnovnykh plodovykh kul'tur k posevu pri stratifikatsii. Moskva, Izd-vo Akademii nauk SSSR, 1956. 24 p. (MLA 9:9)

(Fruit culture) (Seeds)

VASIL'YEV, Ivan Mitrofanovich; GENKEL', P.A., professor, redaktor;
STERNBERG, M.B., redaktor; POLYAKOVA, T.V., tekhnicheskij
redaktor.

[Wintering of plants] Zimovka rastenii. Moskva, Izd-vo
Akademii nauk SSSR, 1956. 307 p. (MLRA 9:6)
(Plants--Frost resistance)

GEL'MAN, N.S.; ZENKEVICH, G.D.; SISAKYAN, N.M., otvetstvennyy redaktor;
OPARIN, A.I., akademik, redaktor; KHRUSHCHOV, G.K., redaktor;
GENKEL', P.A., professor, redaktor; GAYSINOVICH, A.Ye., kandidat
biologicheskikh nauk, redaktor; SIDKINA, Ye.M., tekhnicheskii
redaktor

[Biochemistry of plants; a bibliography of Russian literature, 1738-
1952] Biokhimiia rastenii; bibliograficheskii ukazatel' otechestven-
noi literatury, 1738-1952. Sost. N.S.Gel'man i G.D.Zenkevich. Otv.
red. N.M.Sisakian. Moskva, 1956. 394 p. (MLRA 9:7)

1. Akademiya nauk SSSR. Otdeleniye biologicheskikh nauk. 2. Chlen-
korrespondent AN SSSR (for Sisakyan, Khrushchov)
(Bibliography--Botanical chemistry)

GENKEL', P.A.

"Practical work on the physiology of plant growth and development."
U. Ruge. Reviewed by P.A. Genkel'. Fiziol.rast. 3 no.1:94
Ja-F '56. (MLRA 9:5)
(Botany--Physiology) (Ruge, U.)

GENKEL', P. A.

A-2

USSR/General Division. History. Classics.
Personalities.

Abs Jour : Ref Zhur-Biologiya, No 20, 1957, 85041

Author : P. A. Genkel'

Inst :
Title :

Celebrating the 85th Birthday of Leonid
Aleksandrovich Ivanov

Orig Pub : Fiziol. rasteniy, 1956, 3, No 3, 292-296

Abstract : The article marks the jubilee of the phyto-
physiologist L. A. Ivanov, corresponding
member of the Academy of Sciences USSR,
since 1922 (he was born in 1871). He establi-
shed the interrelationship between the con-
ditions of existence and the means of re-
production of algae. Ivanov's research on
P metabolism in plants brought new ideas
on the transformation of phosphorous

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GENKEL', P.A.; ANTIPOV, N.I.

Water cycle of euhalophytes under natural circumstances. Fiziol.rast.
3 no.4:337-342 J1-Ag '56. (MIRA 9:9)

1. Institut fiziologii rasteniy imeni K.A.Timiryazeva Akademii nauk,
SSSR, Moskva.
(Halophytes) (Plants--Transpiration)

Genkel, P. A.

✓ Significance of viscosity of protoplasm in resistance of plants to high and low temperatures. P. A. Genkel and K. A. Badanova (K. A. Timiryazev Inst. Plant Physiol., Moscow). *Fiziol. Rastenii* 3, No. 5, 455-62 (1959).--Expts. with *Elodea* and sunflower plants showed that with increase of valence of cations supplied to the protoplasm there is an increase in the viscosity of the protoplasm, an increase in the resistance to high temp., and a decrease in resistance to low temps. Low concns. of Na^+ and Ca^{++} increase the hydrophilic nature of protoplasmic colloids, Ca^{++} being the more active. Anions of org. salts raise protoplasmic viscosity and lower plant resistance to high and low temps.; hydrophilic nature of the colloids drops. Adaptation of the plants to dry conditions raises the water content of the tissues and raises the hydrophilic nature of the colloids with increase of hydrophilic viscosity of the protoplasm. G. M. K.

Med

GENKEL', P.A., professor.

A month in Italy. Nauka I shisn' 23 no.5:52-56 '56. (MLBA 9:8)
(Italy--Science)

GENKEL', P.A., doktor biologicheskikh nauk; BELIKOV, I.F., kandidat biologicheskikh nauk.

Aims of biological research in the Far East; out-of-town session of the Department of Biological Sciences in Vladivostok. Vest. AN SSSR 26 no.10:106-109 0 '56. (MIRA 9:11)

(Far East--Biological research)

KURSAHOV, A.L., akademik, otvetstvennyy redaktor; TUMAKOV, I.I., otvetstvennyy redaktor; GEMEL', P.A., professor, otvetstvennyy redaktor; BRITIKOV, Ye.M., redaktor izdatel'stva; ZELENEVA, Ye.V., tekhnicheskiiy redaktor

[In memory of Academician N.A.Maksimov; a collection of articles]
Pamiat' akademika N.A.Maksimova; sbornik statei. Moskva, 1957.
323 p. (MIRA 19:10)

1. Chlen-korrespondent Akademii nauk SSSR (for Tumanov)
(Botany--Physiology)

GENKEL, P. A. and FAN I SUN'

"On the Physiological Importance of Viviparity in Mangrove Plants."

Inst. Plant Physiology in. K. A. Timiryazev, Acad. Sci. USSR and
Inst. Plant Physiology, Chinese Academy of Sciences.

Acta Botanica Sinica, Vol 3, no 2, June 1957, p 59.

COUNTRY : USSR
 CATEGORY : Plant Physiology. Water Regimen. I
 ABS. JOUR. : RZhBiol., No.6 1959, No. 24553
 AUTHOR : Genkel', P.A.; Krapivina, A.T.
 INST. : Academy of Sciences, USSR
 TITLE : On Cuticular Transpiration of Plants
 ORIG. PUB. : V sb.: Pamyati akad. N.A. Maksimova, 1957, 32-41
 ABSTRACT : The mid-day rate of transpiration of leaves of long-fibered cotton growing in Vakhshskaya valley steadily dropped during the growing season. The authors explain this decrease by the aging of cuticular transpiration. Determination of cuticular transpiration in leaves of oak (*Quercus*) and birch (*Betula*) in Moscow showed that it was considerably higher in young plants than in old ones. Cuticular transpiration in apricot (*Prunus armenisa*) and apple (*Pyrus malus*) in Central Asia, although also

CARD: 1/2

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COUNTRY	:		
CATEGORY	:		I
ABS. JOUR.	:	RZhBiol., No. 6	1959, No. 24553
AUTHOR	:		
INST.	:		
TITLE	:		
ORIG. PUB.	:		
ABSTRACT	:	decreasing with age, remains at a high level all during the growing season, which is an adaptation of the plants to the reduction of leaf temperature in conditions of very warm climate. The authors consider the reduction of cuticular transpiration as the plants age as a manifestation of the biogenetic law in plants. Bibliography of 33 titles.— T. F. Koretskaya.	
CARD:	2/2		

GENKEL', P.A.; ANDREYEVA, I.N.; YERMAKOVA, K.O.; TSVETKOVA, I.V.

Effect of the new tillage system on the basic features in the
physiology of wheat. Izv. AN SSSR. Ser.biol. no.4:448-465 J1-Ag '57.
(MLRA 10:8)

1. Institut fiziologii rasteniy im. K.A.Timiryazeva Akademii nauk
SSSR.

(TILLAGE) (WHEAT)

GENKEL', P.A.

"Plant physiology" [in Bulgarian] by Kiril Iordanov Popov.
Reviewed by P.A. Genkel'. *Fiziol.rast.* 4 no.3:294-295 My-Je '57.
(MLBA 10:7)

(Botany--Physiology)

(Popov, Kiril Iordanov)

GENKEL', P.A.

Nikolai Petrovich Krasinskii; obituary. Fiziol.rast. 4 no.3:296-297
My-Je '57. (MLRA 10:7)
(Krasinskii, Nikolai Petrovich, 1896-1957)

GENKEL. P.A.; MOROZOVA, R.S.

Electron microscope investigation of chloroplasts of *Bellis perennis* in connection with its transition to the state of winter dormancy [with summary in English]. *Fiziol. rast.* 4 no.6:509-513 M-D '57.
(MIRA 10:12)

1. Instiut fiziologii rasteniy im. K.A. Timiryazeva AN SSSR, Moskva.
(Chromatophores) (Dormancy (Plants)) (Electron microscopy)

25-9-3/40

AUTHOR: Genkel', P.A., Doctor of Biological Sciences, Kushner, Kh.F.,
Professor

TITLE: Biology Helps Agriculture (Biologiya - sel'skomu khozyaystvu)

PERIODICAL: Nauka i Zhizn', 1957, # 9, p 5-9 (USSR)

ABSTRACT: Soviet biology is following Professor I.V. Michurin's principles by not only trying to explain complex biological phenomena but also by mastering them and on such a basis to transform plant and animal organisms to suit the requirements of man. Michurin's methods led for instance to the development of new varieties of fruit trees which are able to stand the rough climate of Siberia and the Urals. During the long and cold winter, apple trees that spread on the ground are completely covered with snow and are thus well protected against frost. Making plants temperature-resistant is another task of Soviet scientists. By exposing swelled seeds of corn, sugar beet or peas to heat until they are dry, their properties change considerably and the drought-resistance is improved. The cells of such plants are very small and their leaf surfaces very large. In times of drought these plants hold more water than

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Biology Helps Agriculture

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the unprocessed ones and produce better crops. Similar methods have been applied to make plants more salt-resistant. Cotton seeds soaked in salt water gave in Azerbaydzhan, on saline soil, crops of 20 - 40 % above the local average. Soviet scientists are pointing out the great importance of microelements for agricultural plants. Experiments conducted in the Ukraine have shown that the use of manganese fertilizers raised crops very considerably.

There are 7 figures.

AVAILABLE: Library of Congress

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GENKEL', P.A.

"Plant physiology," by B.A. Rubin. Pt.2. Reviewed by P.A. Genkel'.
Usp. sovr. biol. 44 no.3:384-386 H-D '57. (MIRA 11:1)
(PLANT PHYSIOLOGY)
(RUBIN, B.A.)

SOKOLOV, Andrey Vasil'yevich; KHRUSHCHOV, G.K., red.; GENKEL', P.A., prof., red.; GAYSIMOVICH, A.Ye., kand.biol.nauk, red.; TYURIN, I.V., akademik, red.; POSPELOV, I.A., red.isd-va; GUSEVA, A.P., tekhn.red.

[History of agricultural chemistry in the U.S.S.R.] Ocherki iz istorii agronomicheskoi khimii v SSSR. Moskva, Izd-vo Akad. nauk SSSR, 1958. 199 p. (MIRA 12:2)

1. Chlen-korrespondent AN SSSR (for Khrushchov).
(Agricultural chemistry)

~~GENKEL~~, Ravel Aleksandrovich; NEKHLIUDOVA, A.S., red.; TSYPO, R.V.,
tekhn.red.

[Physiology of plants and principles of microbiology; textbook
for pedagogical institutes] Fisiologiya rastenii s osnovami
mikrobiologii; uchebnik dlia pedagogicheskikh institutov.
Moskva, Gos. uchebno-pedagog. izd-vo M-va prosv. RSFSR, 1958.
462 p. (MIRA 12:1)

(Botany--Physiology) (Microbiology)

SOV-25-58-10-26/48

AUTHOR: Genkel', P.A., Doctor of Biological Sciences, Professor

TITLE: In the Tropics of China (V tropikakh Kitaya)

PERIODICAL: Nauka i zhizn', Nr 10, 1958, pp 59 - 64 (USSR)

ABSTRACT: Together with B.A. Rubin, Professor of Moscow University, the author visited the tropical zones of China. He gives a detailed description of his trip through the country with special regard to the study of tropical plants. There are 6 photographs and 2 drawings.

1. Plants--China

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AUTHOR: Genkel', P. A., Doctor of Biological Sciences SOV/50-58-10-14/55

TITLE: Physiology of Plant Stability and Its Investigation in China
(Fiziologiya ustoychivosti rasteniy i yeye izucheniye v Kitaye)

PERIODICAL: Vestnik Akademii nauk SSSR, 1958, Nr 10, pp 74-78 (USSR)

ABSTRACT: Apart from the work of the experts Lo Tsung-lo, Ying Hun-ch'ang, Lo Ch'en-ho, T'ang P'ei-sung, Lo Shih-wai, and others in the field of plant physiology in China, comparatively little has been done yet in the research field of plant stability. Last winter the author of this article was invited by the Institut fiziologii rasteniy Akademii nauk Kitaya (Institute of Plant Physiology of the Chinese AS) to visit the Chinese People's Republic to inform the scientists of that country about some of the research methods and results obtained by Soviet scientists in this field. During his three months' stay he gave fourteen lectures and reports in the cities of Peking, Canton, Nada, and Shanghai; he also performed laboratory experiments. In conjunction with Chinese scientists the cold resistance of plants (Agava Sisalana). the germinative faculty of coffee seeds and others were tested. Thanks to the Institut botaniki Yuzhnogo Kitaya

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Physiology of Plant Stability and Its Investigation in China SOV/30-58-10-14/53

(Botanical Institute of Southern China) it was made possible to carry on investigation in the tropical regions of the country where rubber plants (*Hevea brasiliensis*) are cultivated. Many laboratories are concerned with the study of rice. The author inspected the Pedagogicheskiy universitet Vostochnogo Kitaya (**Pedagogical University of Eastern China**). He also visited the Pekinskaya sel'skokhozyaystvennaya akademiya (**Peking Academy of Agriculture**), the sel'skokhozyaystvennyye instituty v Kantone i Shankhaye (Canton and Shanghai Institutes of Agriculture).

Card 2/2

GENKEL', P.A., doktor biol.nauk, prof.

In the Chinese tropics. Nauka i zhizn' 25 no.10:59-64 0 '58.
(China--Plants) (MIRA 11:11)

ODNEN, I. A.

"The importance of colloidal-chemical properties of the protoplasm for the physiology of plant resistance".

report presented at a Joint Session of the Biological Dept. of AN USSR and Biological and Medical Depts. AN Gruziiya SSR, Tbilizi, 28 Sept - 3 Oct 1957. Vestnik Akad. Nauk SSSR, 1958, Vol. 28, No. 1, pp. 121-125. (author Tsidzishvili, V. N.)

GENKEL', P. A.

"The Importance of Quiet in the Life of Plant Organisms. "

report presented at the Congress of Biological Research in the Moldavian SSR
16-21 Sept 1957, Moldavian Branch AS USSR organized together with VASKhNIL.
Vestnik AN SSSR, 1958, Vol. 28, No. 1, p. 125-126. (author Kosenko, I. Ye.)

GENKEL, P.A.
HENCKEL, P.A.

"Drought resistance of Plants and Methods of Increasing It."
Paper submitted for the Int'l Botanical Congress, Montreal, Canada, 19-29 Aug 1959.

K.A. Timiriazev Inst. of Plant Physiology, Academy of Sciences U.S.S.R., Moscow.

OMENKEL', Pavel Aleksandrovich; KUSHNIRENKO, Svetlana Vasil'yevna;
ATROSHCHENKO, L.Ye., tekhn.red.

[Frost resistance of cultivated plants and ways of increasing
it] Kholodoustoichivost' kul'turnykh rastenii i puti ee povy-
sheniia. Moskva, Izd-vo "Znanie," 1959. 31 p. (Vsesoiuznoe
obshchestvo po rasprostraneniuiu politicheskikh i nauchnykh
znanii. Ser.8. Biologiya i meditsina. no.16) (MIRA 12:9)
(Plants--Frost resistance)

FEDOROV, Aleksandr Konstantinovich; GENKEL', P.A., prof., otv.red.;
SAMYGIN, G.A., red.isd-va; MAKUNI, Ye.V., tekhn.red.

[Developmental characteristics of overwintering plants]
Osobennosti razvitiia zimniushchikh rastenii. Moskva, Izd-vo
Akad.nauk SSSR, 1959. 196 p. (MIRA 12:4)
(Plants--Frost resistance)

GENKEL', P.A., prof., otv.red.; ENDEL'MAN, O.N., red.izd-va; MAKOGONOVA,
I.A., tekhn.red.

[Biological resources of the Far East; collection of articles]
Biologicheskie resursy Dal'nego Vostoka; sbornik statei. Moskva,
Izd-vo Akad.nauk SSSR, 1959. 216 p. (MIRA 13:2)

1. Akademiya nauk SSSR. Dal'nevostochnyy filial.
(Soviet Far East--Biological research)

GENKEL' P.A.; MOROZOVA, R.S.

Electron microscopic study of chloroplasts of *Bellis perennis* in spring. *Fiziol. rast.* 6 no.5:575-578 S-O '59. (MIRA 13:2)

I.K.A. Timiryazev Institute of Plant Physiology, U.S.S.R. Academy of Sciences, Moscow.

(Chromatophores)

PETINOV, Nikolay Stepanovich, doktor biolog.nauk; GENKEL', P.A., doktor biolog.nauk, otv.red.; IVANOV, V.P., red.izd-va; KASHINA, P.S., tekhn.red.

[Physiology of irrigated wheat] Fiziologiya oroshaemoi pshenitsy.
Moskva, Izd-vo Akad.nauk SSSR, 1959. 553 p. (MIRA 13:1)
(Wheat) (Irrigation farming)

GENKAL P.A.; IN KHUM-CHAN [Ying Hung-ch'ang]; CHZHAO TUN-FAN [Chao T'ung-fan];
SHEN KUN-MYU [Shêng K'ung-miu]

Effect of low positive temperatures on *Agave sisalana*. Izv.
AN SSSR.Ser.biol. no.3:379-390 My-Je '59. (MIRA 12:9)

1. Institute of Plant Physiology, Academy of Sciences of the
U.S.S.R., Moscow, and Institute of Plant Physiology of China.
(CHINA--SISAL HEMP--DISEASES AND PESTS)
(PLANTS, EFFECT OF TEMPERATURE ON)

GENKEL', P.A. [Henckel, P.A.]

Fiftieth anniversary of the publication of V.I. Lenin's book
"Materialism and empiriocriticism." Fiziol.rast. 6 no.3:257-262
My-Je '59. (MIRA 12:8)
(Plant physiology) (Science--Philosophy)

GENKEL', P.A.; KUSHNIRENKO, S.V.

Photosynthesis in tomato plants hardened against cold by subjection
of seeds to variable temperatures. Fiziol. rast. 6 no.4:446-450 Jl-Ag
'59. (MIRA 12:10)

I.K. A. Timiriazev Institute Plant Physiology, U.S.S.R. Academy of
Sciences, Moscow.

(Tomatoes) (Plants--Frost resistance)
(Photosynthesis)

GENKEL', P.A.

Robert Brown; on the centennial of his death. Izv. AN SSSR Ser.biol.
24 no.1:139-143 Ja-F '59. (MIRA 12:2)
(BROWN, ROBERT, 1773-1858)

GENTEL', P.A.

Work of Jagadis Chandra Bose in the field of plant physiology.
Vop.1st.est.1 tskh. no.8:26-32 '59. (MIRA 13:5)
(Bose, Jagadis Chandra, 1858-1937)
(Botany--Physiology)

GENKEL', P.A., prof., otv. red.; MATSYUK, L.S., kand. sel'khoz. nauk, zam. red.; DIMO, N.A., red. [deceased]; DIKUSAR, I.G., doktor sel'khoz. nauk, red.; YAROSHENKO, M.F., doktor biol. nauk, red.; KOVARSKIY, A.Ye., doktor sel'khoz. nauk, red.; ZUBKOV, A.A., doktor med. nauk, red.; PRINTS, Ya.I., doktor biol. nauk, red.; GEYDEMAN, T.S., kand. biol. nauk, red.; IVANOV, S.M., kand. bil. nauk, red.; USPENSKIY, G.A., kand. biol. nauk, red.; GERGELEZHIV, A.K., kand. tekhn. nauk, red.; FITOVA, L., red.; KARYAKINA, I., red.; KOCHANOVA, N., red.; TEL'FIS, V., tekhn. red.

[Papers of the United Scientific Session of the Department of Biological Sciences of the Academy of Sciences of the U.S.S.R. , the Department of Agriculture of the V.I.Lenin All-Union Academy of Agricultural Sciences and the Moldavian Section of the Academy of Sciences of the U.S.S.R.] Trudy ob'edinennoi nauchnoi sessii: Otdelenie biologicheskikh nauk AN SSSR, Otdelenie zemledeliia VASKhNIL, Moldavskii filial AN SSSR. Kishinev, Kartia Moldoveniaske. Vol.2. 1959. 483 p. (MIRA 15:5)

1. Ob'edinennaya nauchnaya sessiya, Kishinev, 1957. Zamestitel' akademika-sekretarya Otdeleniya biologicheskikh nauk Akademii nauk SSSR (for Genkel'). 2. Deystvitel'nyy chlen Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk im. V.I.Lenina (for Dimo). (Moldavia--Agricultural research--Congresses)

17(1)

AUTHORS:

Genkel', P. A., Zhivukhina, G. M.

SOV/20-127-1-61/65

TITLE:

The Process of Protoplasm Isolation as the Second Phase of Winter Wheat Hardening (Protsess obosobleniya protoplazmy kak vtoraya faza zakalivaniya ozimnykh pshenits)

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 127, Nr 1, pp 220-223 (USSR)

ABSTRACT:

The plants resistant to frost are characterized by a period of long-lasting and profound rest. The resistance of the tissues of resting plants is determined on the whole by the conditional peculiarities of the plasma (Refs 1-3). The lacking of growth processes (Refs 4-8 for winter wheat), the reduced metabolism intensity as well as the protoplasm separation are characteristic of the period of rest. During the period of rest the content in growth substances is considerably reduced (Refs 9-12). In plants hardened against frost and in a state of rest the protoplasm is characterized by a higher viscosity and by a reduced permeability (Refs 18-19). The physiological processes are of little intensity in winter wheat (Refs 20, 21). The state of rest is of little stability in winter crops. However, if winter wheat is stored during the winter in a warm room for a few days only,

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Phase of Winter Wheat Hardening

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the growth processes start quickly in contrast to ligneous plants. The period of rest of the winter crops is very short because no profound transformation of the protective and supply substances takes place in their cells and because they have no reserve fat which guarantees a stable state of rest (Ref 3). The transition to the state of rest takes place under the influence of autumn conditions of temperature and light. Under the same circumstances the hardening of the plants against low temperature takes place. Thus the transition to the period of rest and the hardening occur during the same period in the life of plants, and both reflect the same processes during the course of which the plants attain the resistance to frost. The hardening is attained in two stages: 1) accumulation of carbohydrates; 2) change of the physico-chemical protoplasm properties (Ref 2). In the present paper the cyto-physiological state of the winter wheat was investigated. The observations of the authors confirmed that the protoplasm becomes peeled off from the cell-coverings in the late autumn- and winter period. The degree of the state of rest differs in the individual organs of the winter wheat. The state of rest of the leaves

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Phase of Winter Wheat Hardening

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is not long. The protoplasm is partly detached only in a few epidermic cells. In autumn and winter, a concave plasmolysis is predominant. At the turn of the year many damaged and dead cells appear. The most complete rest (according to the number of cells with separated protoplasm), and the most stable (according to the length of separation) were found in the growth cone and in the tillering knots (Fig 1). The observations of the authors showed: 1) that the protoplasm separation from the cell walls begins after the first stage of the hardening, that is the accumulation of the soluble carbohydrates in the cells, and 2) that this separation begins at slight frost. In other words, the conditions of the separation process of the protoplasm are exactly the same as those at which the second stage of hardening of the winter crops is attained which is connected with the physico-chemical changes of the

Card 3/4

The Process of Protoplasm Isolation as the Second
Phase of Winter Wheat Hardening

S07/20-127-1-61/65

protoplasm. The said separation occurs obviously just in the second hardening stage and forms the final stage of the development of the resistance to frost of the winter crops under autumn conditions. There are 1 figure, 1 table, and 22 references, 21 of which are Soviet.

ASSOCIATION: Institut fiziologii rasteniy im. K. A. Timiryazeva Akademii nauk SSSR (Institute of Plant Physiology imeni K. A. Timiryazev of the Academy of Sciences, USSR)

PRESENTED: February 2, 1959, by A. L. Kursanov, Academician

SUBMITTED: February 2, 1959

Card 4/4

BOGOMOLOV, G.V., otv.red.; ANTIPOV-KARATAYEV, I.N., akademik, red.;
~~GENKEL', P.A.~~, prof., doktor biol.nauk, red.; CHERVINSKIY,
V.F., doktor sel'skokhoz.nauk, red.; PAVLOV, A.N., red.izd-va;
KASHINA, P.S., tekhn.red.

[Problems pertaining to soil salinization and water resources]
Problema zasoleniia pochv i vodnykh istochnikov. Moskva, 1960.
173 p. (MIRA 13:10)

1. Akademiya nauk SSSR. Mezhdunarodstvennaya komissiya po izu-
cheniyu zasushlivykh i poluzasushlivykh zon. 2. Chlen-korrespon-
dent AN Belorusskoy SSR; Mezhdunarodstvennaya komissiya po izu-
cheniyu zasushlivykh i poluzasushlivykh zon SSSR Soveta po izucha-
niyu proizvoditel'nykh sil pri Prezidiume AN SSSR (for Bogomolov).
 3. AN Tadzhikskoy SSR (for Antipov-Karatayev). 4. Institut fiziolo-
gii rasteniy im. K.A.Timiryazeva AN SSSR (for Genkel').
- (Alkali lands) (Water, Underground) (Irrigation)

REYTMAN, Vladimir Grigor'yevich; GENKEL', P.A., prof., otv.red.;
OGANOVA, E.A., red.isd-vo; POLYAKOVA, T.V., tekhn.red.

[Internal brown spot in potatoes] Priroda rshavosti kartofelis.
Moskva, Izd-vo Akad.nauk SSSR, 1960. 190 p.

(MIRA 14:1)

(Potatoes--Diseases and pests)

KRUZHILIN, Aleksey Stepanovich; GENKEL', P.A., otv.red.; BELIK, V.F.,
red.izd-va; POLENOVA, T.V., tekhn.red.

[Interaction of stock and scion in plant grafts] Vzaïmovliianie
privoia i podvoia rastenii. Moskva, Izd-vo Akad.nauk SSSR,
1960. 271 p. (MIRA 13:7)

(Grafting)

SAVEL'YEV, Nil Mikhaylovich; GENKEL', P.A., prof., otv.red.; KLYUSHKIN,
P.A., red.izd-va; MAKUNI, Ye.V., tekhn.red.

[Biological principles underlying the cultivation of alfalfa
for seed production in Western Siberia] Biologicheskie osnovy
vozdelyvaniia semennoi liutserny v Zapadnoi Sibiri. Moskva,
Izd-vo Akad.nauk SSSR, 1960. 350 p. (MIRA 13:7)

1. Chlen-korrespondent Akademii pedagogicheskikh nauk RSFSR;
Institut fiziologii rasteniy im. K.A.Timiryazeva AN SSSR (for
Genkel').

(Siberia, Western--Alfalfa)

(Seed production)

TUMANOV, I.I., prof., otv.red.; GENKEL', P.A., prof., otv.red.; STROGONOV, B.P., kand.biol.nauk, otv.red.; SAMYOIN, Yu.A., red.izd-va; KASHINA, P.S., -tekhn.red.; RYLINA, Yu.V., tekhn.red.

[Physiology of hardiness in plants; frost resistance, drought resistance, and salt tolerance. Transactions of the conference of March 3-7, 1959] Fiziologiya ustoychivosti rasteniy; morozoustoychivost', zasukhoustoychivost' i soloustoychivost'. Trudy konferentsii, 3-7 marta 1959 g. Moskva, 1960. 776 p.

(MIRA 13:12)

1. Akademiya nauk SSSR. Institut fiziologii rasteniy. 2. Institut fiziologii rasteniy im. K.A.Timiryazeva AN SSSR, Moskva (for Tumanov, Genkel', Strogonov). 3. Chlen-korrespondent AN SSSR (for Tumanov).

(Plants--Frost resistance) (Plants, Effect of aridity on)
(Plants, Effect of salts on)

KONAREV, V.I., prof., otv.red.; BELOZERSKIY, A.N., red.; GENNAT', P.A.,
prof., red.; SERGEYEV, L.I., prof., red.; MAZILKIN, I.A., kand.
biolog.nauk, red.; KHANISLAMOV, M.G., kand.sel'skokhoz.nauk, red.;
POROYKOV, Yu.D., red.; VALEYEV, G.G., tekhn.red.

[Biology of nucleic metabolism in plants; reports at the joint
scientific session of Nov.25-28, 1958] Biologiya nukleinovogo
obmena u rastenii; doklady ob"edinennoi nauchnoi sessii, 25-28
noyabrya 1958 g. Ufa, 1959. 181 p. (MIRA 13:6)

1. Akademiya nauk SSSR. Bashkirekiy filial, Ufa. Institut biolo-
gii. 2. Chlen-korrespondent AN SSSR (for Belozerskiy). 3. Insti-
tut biologii Bashkriakogo filiala Akademii nauk SSSR (for Konarev,
Mazilkin, Khanislamov).

(PLANTS--METABOLISM)

(NUCLEIC ACIDS)

GENKEL', P.A.; TSVETSKOVA, I.V.

Use of gravel cultures in studying soil and atmospheric aridity.
Fiziol. rast. 7 no. 5:610-615 '60. (MIRA 13:10)

1. K.A. Timiriazev Institute of Plant Physiology, U.S.S.R.,
Academy of Sciences, Moscow.
(Plants--Soilles culture)
(Plants, Effect of aridity on)

GENKEL', P.A.

Increasing the salt resistance of plants in soils with high sulfate concentrations. Izv. AN SSSR. Ser. biol. no. 4:550-561 J1-Ag '60. (MIRA 13:8)

1. Institut fiziologii rasteniy imeni K.A. Timiryazeva Akademii nauk SSSR.

(PLANTS, EFFECT OF SULFATES ON)

GENKEL' P.A.

Distribution of heteroauxin in plant stems and roots during geotropic bending. Fiziol. rast. 7 no.2:207-213 '60. (MIRA 14:5)

I. K. A. Timiriachev Institute of Plant Physiology, U.S.S.R
Academy of Sciences, Moscow.
(Geotropism)
(Indolacetic acid)

GENKEL', P.A.; BARSKAYA, Ye.I.

Seasonal changes in chloroplasts of the spruce. *Fiziol. rast.* 7
no.6:645-653 '60. (MIRA 14:1)

1. K.A. Timiriasev Institute of Plant Physiology, U.S.S.R. Academy
of Sciences, Moscow.
(Chromatophores) (Spruce)

GENKEL', P.A.

Sixtieth birthday of Professor Fedor Danilovich Skazkin. Bot. shur.
45 no.12:1816-1818 D '60. (MIRA 13:12)
(Skazkin, Fedor Danilovich, 1900-)

ANTIPOV-KARATAYEV, I.N., akademik, red.; BOGOMOLOV, G.V., akademik, red.; GENKEL', P.A., doktor biol. nauk, red.; PETINOV, N.S., doktor biol. nauk, red.; CHERVINSKIY, V.F., doktor sel'khoz. nauk, red.; SHAFRANSKAYA, M.Z., red. izd-va; YECOROVA, N.F., tekhn. red.

[Plant-water relations in arid regions of the U.S.S.R; [reports of Soviet scientists] Vodnyi rezhim rastenii v zasushlivykh raionakh SSR; [doklady sovetskikh uchenykh]. Moskva, izd-vo Akad. nauk SSSR, 1961. 274 p. (MIRA 15:3)

1. Symposium on Plant-Water Relations in Arid and Semi-Arid Conditions, Madrid, 1959. 2. Akademiya nauk Tadzhikskoy SSR (for Antipov-Karatayev). 3. Akademiya Belorusskoy SSR (for Bogomolov). 4. Institut fiziologii rasteniy im. K.A. Timiryazeva Akademii nauk SSSR (for Genkel', Petinov).

(Plants--Water requirements)

(Plants, Effect of aridity on)

GENKEL', P.A., prof.

Chlorella, a unicellular green alga as a source of organic matter and oxygen. Biol. v shkole no.3:76-80 My-Je '61.

(MIRA 14:7)

1. Institut fiziologii rasteniy imeni K.A.Timiryazeva AN SSSR.
(Algae)

GENKEL', P.A.

In memory of Arkadii Ivanovich Potapov. *Fiziol. rast.* 8 no.1:143-144
'61. (MIRA 14:3)

(Potapov, Arkadii Ivanovich, 1882-1960)

GENKEL', P.A.

Increasing the draught resistance of plants. Vest. AN SSSR 31
no.10:91-95 0 '61. (MIRA 14:9)

1. Chlen-korrespondent Akademii pedagogicheskikh nauk RSFSR.
(Plants--Water requirements)

STROGONOV, Boris Petrovich; GENKEL', P.A., otv. red.; MAKAROVA, O.V.,
red. izd-va; PRUSAKOVA, T.A., tekhn. red.; KASHINA, P.S., tekhn.
red.

[Physiological foundations of the salt resistance of plants; with
regard to different types of soil salinization] Fiziologicheskie
osnovy soeustoichivosti rastenii (pri raznokachestvennom zasolenii
pochvy). Moskva, Izd-vo Akad. nauk SSSR, 1962. 365 p.

(MIRA 15:7)

(Plants, Effect of salts on)

GENKEL', Pavel Aleksandrovich, prof.; SHONIYA, A.L., red.; TSIRUL'NITSKIY,
N.P., tekhn. red.; TSYPO, R.V., tekhn. red.

[Plant physiology and the principles of microbiology] Fiziologiya
rastenii s osnovami mikrobiologii; uchebnik dlia pedagogicheskikh
institutov. Izd.2., perer. i ispr. Moskva, Uchpedgiz, 1962.
535 p. (MIRA 16:1)

(PLANT PHYSIOLOGY) (MICROBIOLOGY)

GENKEL', P.A., prof.

Increasing drought resistance of cultivated plants by means of
hardening them before sowing. Biol. v shkole no.1:77-82 Ja-F
'62. (MIRA 15:1)

1. Institut fiziologii rasteniy imeni K.A.Timiryazova AN SSSR.
(PLANTS---HARDINESS)

GENKEL', P.A., prof.; ANDREYEVA, I.N., kand.biologicheskikh nauk

New scientific data on cellular structure. Biol.v shkole
no.6:83-88 M-D '62. (MIRA 16:2)

1. Institut fiziologii rasteniy imeni K.A.Timiryazeva AN SSSR.
(Cells) (Electron microscopy)

GENKEL', P.A.; MOROZOVA, R.S.; PRONINA, N.D.

Ability for synthesis in drought-resisting tomato plants. Fiziol.
rast. 9 no.1:80-85 '62. (MIRA 15:3)

1. K.A.Timiriazev Institute of Plant Physiology, U.S.S.R. Academy
of Sciences, Moscow.
(Tomatoes--Varieties) (Plants, Effect of aridity on)

GENKEL', P.A., prof.; OKNINA, Ye.Z., kand.biologicheskikh nauk

Microscope gives information on frost resistance. Nauka i zhizn'
29 no.4:41-43 Ap '62. (MIRA 15:7)
(Plants--Frost resistance)

GENKEL', P.A.

V.M. Lomonosov and his role in the development of Russian
culture and science. Izv. AN SSSR. Ser. biol. no.3:461-472
My-Je '62. (MIRA 15:6)
(LOMONOSOV, MIKHAIL VASIL'EVICH, 1711-1765)

GENKEL', P.A.; BARSKAYA, Ye.I.

Changes in the viscosity of the protoplasm in the ontogenesis of
some herbaceous plants as related to their resistance to drought.
Bot. zhur. 47 no.6:802-807 Je '62. (MIRA 15:7)

1. Institut fiziologii rasteniy imeni K.A. Timiryazeva,
Akademii nauk SSSR, Moskva.

(Protoplasm)
(Plants, Effect of aridity on)

GENKEL', P.A., otv. red.; PRONINA, P.D., red.izd-va; YEGOROVA,
N.P., tekhn. red.; RYLINA, Yu.V., tekhn. red.

[Physiology of tree species in the southern Far East] Fiziolo-
giya drevesnykh porod iuga Dal'nego Vostoka. Moskva, Izd-vo
Akad. nauk SSSR, 1963. 83 p. (MIRA 16:3)

1. Akademiya nauk SSSR. Dal'nevostochnyy filial, Vladivostok.
(Soviet Far East--Trees--Physiology)

GENKEL', P.A., prof., otv. red.; PRONINA, N.D., red.izd-va; SUSHKOVA,
L.A., tekhn. red.

[Physiology of soybean and potatoes in the Far East] Fizio-
logiya soi i kartofelia na Dal'nem Vostoke. Moskva, Izd-vo
AN SSSR 1963. 132 p. (MIRA 16:10)

1. Akademiya nauk SSSR. Dal'nevostochnyy filial. Vladivostok.
(Maritime Territory--Potatoes--Diseases and pests)
(Plants--Assimilation)
(Maritime Territory--Soybean)

SABININ, Dmitriy Anatol'yevich, prof.; CHAYLAKHYAN, M.Kb., prof., otv. red.; KUPSANOV, A.L., akademik, red.; GENKEL', P.A., red.,
BLAGOVESHCHENSKIY, A.V., prof., red.; TRUBETSKOVA, O.M., kand. biol. nauk, red.; SHTERNBERG, M.B., red. izd-va; SUSHKOVA, L.A., tekhn. red.; KASHINA, P.S., tekhn. red.

[Physiology of plant development] Fiziologiya razvitiya rastenii. Moskva, Izd-vo Akad. nauk SSSR, 1963. 194 p. (MIRA 16:2)

1. Chlen-korrespondent Akademii nauk Armyanskoy SSR (for Chaylakhyan).
2. Chlen-korrespondent Akademii pedagogicheskikh nauk RSFSR (for Genkel').

(Plant physiology)

PETINOV, N.S., doktor biol. nauk, prof., red.; ALEKSEYEV, A.M.,
doktor biol. nauk, prof., red.; GUSEV, N.A., doktor biol. nauk, red.;
ZHOLKEVICH, V.N., doktor biol. nauk, red.; KUL'TIASOV, I.M.,
red. izd-va; UL'YANOVA, O.G., dokn. red.

[Water balance of plants as related to their metabolism
and productivity] Vodnyi rezhim rastenii v svyazi s obmenom
veshchestv i produktivnost'iu. Moskva, Izd-vo AN SSSR,
1963. 334 p. (MIRA 16:10)

1. Akademiya nauk SSSR. Institut fiziologii rasteniy.
(Plants--Water requirements)
(Plants--Metabolism)

GENKEL', P.A.; PRONINA, H.D.

Extraction of protoplasts from dormant onion epidermis cells
[with summary in English]. Fiziol. rast. 10 no.2:124-129
Mr-Apr '63. (MIRA 16:5)

I. K.A. Timiriazev Institute of Plant Physiology, U.S.S.R.
Academy of Sciences, Moscow.
(Protoplasm) (Dormancy in plants)

GENKEL', P.A., prof.

Symposium on the Physiology, Biochemistry, and Ecology of
the Germination of Seeds. Vest. AN SSSR 33 no.12:76-77
D '63. (MIRA 17:1)

APPROVED FOR RELEASE: 08/31/2001

[Increasing the salt resistance of cotton, corn, and alfalfa] Povyshenie solesostoiustoiwosnosti kulekocznika, kukuruzy i liutserny. Baku, Ist-vo R. Azern. 1962. 216 p.

(1962-27:10)

GENKEL', Iavel Aleksandrovich; GIKHIL, Yekaterina Zakharovna;
FLOKOF'YEV, A.A., doktor biol. nauk, otv. red.;
FASHKOVSKIY, Yu.A., red.

[State of the dormancy and frost resistance of fruit plants]
Sostoianie pokoia i morezoustoichivost' plodovykh rastenii.
Moskva, Nauka, 1964. 241 p. (1964 1749)

KURSANOV, A.L., akademik, otv. red.; OVCHAROV, K.Ye., doktor biol. nauk, red.; GENKEL', I.A., prof., red.; POLYAKOV, I.M., prof., red.; PROKOF'YEV, A.A., prof., red.; STROMA, I.G., kand. sel'khoz. nauk, red.; SEDENKO, D.M., red.; GENKEL', K.P., red.; KHOR'KOV, Ye.I., red.

[Biological bases of increasing the quality of farm crop seeds; materials of a scientific session held November 26-30, 1963 in Moscow] Biologicheskie osnovy povysheniya kachestva semian sel'skokhoziaistvennykh rastenii; materialy nauchnoi sessii, sostoiavsheisia 26-30 noiabria 1963 g. v Moskve. Moskva, Nauka, 1964. 278 p. (MIRA 18:3)

1. Akademiya nauk SSSR. Institut fiziologii rasteniy.

ZHURBITSKIY, Z.I., otv. red.; CHNKEL', P.A., red.; GUNAR, I.I.,
red.; POTAPOV, N.G., red.; ETASIL'NIKOVA, G.V., red.izd-va;
GUS'KOVA, O.M., tekhn. red.

[Physiological basis for the plant nutrition system] Fizio-
logicheskoe obosnovanie sistemy pitaniia rastenii. Moskva,
Izd-vo "Nauka," 1964. 339 p. (MIRA 17:3)

1. Akademiya nauk SSSR. Institut fiziologii rasteniy.

ZHURBITSKIY, Z.I., otv. red.; GENKEL', P.A., red.; GUNAR, I.I., red.;
POTAPOV, N.G., red.; POTEKHINA, N.A., red.

[Role of mineral elements in the metabolism and productivity
of plants] Rol' mineral'nykh elementov v obmene veshchestv i
produktivnosti rastenii. Moskva, Izd-vo "Nauka," 1964. 358 p.
(MIRA 17:7)

1. Akademiya nauk SSSR. Institut fiziologii rastenii.

GENKEL', P.A.; MART'YANOVA, K.L.; ZUBOVA, L.S.

Experiments on the presowing drought hardening of plants
conducted under firm conditions. Fiziol. rast. 11 no. 3:
538-543 '64. (MIRA 17:7)

1. Institut fiziologii rasteniy imeni Timiryazeva AN SSSR,
Moskva i Michurinskiy gosudarstvennyy pedagogicheskiy institut.

GENKEL', P.A.; PRONINA, H.D.

Ability of plant cells to endure dehydration in the dormant state.
Fiziol. rast. 11 no.4:667-673 1964.

(MIRA 17:11)

1. Institut fiziologii rasteniy imeni Timiryazeva AN SSSR, Moskva.

GENKEL', P.A.; BAKANOVA, L.V.; SAMYGIN, G.A.

Freezing of plants with a low frost resistance. Fiziol.rast. 12
no.1:69-75 Ja-F '65. (MIRA 18:3)

1. Institut fiziologii rasteniy imeni Timiryazeva AN SSSR, Moskva.

GENEKOVA, I.V., NAKANOVA, I.V.

Surface characteristics of the cell protoplasts of plants in
the state of dormancy. Fiziol.rast. 12 no.4:659-664. J1-Ag '65.
(MIRA 18:12)

1. Institut fiziologii rasteniy imeni K.A.Timiryazeva AN SSSR,
Moskva. Submitted March 31, 1965.

GENKEL', S.V.

Major track repairs in tunnels. Put' i put. khoz. no.6:31 Je '59.
(MIRA 12:10)

1. Zamestitel' nauchal'nika distantsii puti, stantsiya Arkhara,
Amurskaya doroga.
(Railroads--Track) (Tunnels)

GREEN, I.

This is not payment of premiums, but a squandering of funds. Sots.
trud no.7:135 J1 '57. (MLHA 10:8)

1. Nachal'nik OOT Novosibirskogo metallurgicheskogo zavoda imeni
A.N. Kuz'mina.
(Scrap metal) (Bonus system)

GENKEN, I.

Progressive experience is made available to all workers. Sov.
profsoiuzy 7 no.13:33-34 J1 '59. (MIRA 12:10)

1. Predsedatel' komissii po proizvodstvenno-massovoy rabote zavodsko-
go komiteta Novosibirskogo metallurgicheskogo zavoda im. A.N.
Kuz'mina.
(Novosibirsk--Metallurgical plants)

GENKEN, I.; SIMAKOV, M.

What practice of the Novosibirsk Metallurgical Plant proves.
Sots.trud 6 no.5:113-118 My '61. (MIRA 14:6)

1. Nachal'nik otdela organizatsii truda Novosibirskogo metallurgicheskogo zavoda imeni A. N. Kuz'mina (for Genken).
2. Nachal'nik otdela tekhnicheskogo kontrolya Novosibirskogo metallurgicheskogo zavoda imeni A. N. Kuz'mina (for Simakov).
(Novosibirsk—Steel industry--Quality control)

MAL'TSEV, I.; GENKEN, I.

Toward the cherished objective. Sov.profsouzy 7 no.9:15-17 My
'61. (MIRA 14:4)

1. Zamestitel' predsedatelya zavkoma Novosibirskogo metallurgicheskogo
zavoda imeni A.M.Kuz'mina (for Mal'tsev). 2. Nachal'nik otдела
organizatsii truda, chlen zavkoma Novosibirskogo metallurgicheskogo
zavoda imeni A.N.Kuz'mina (for Genken).
(Novosibirsk--Steel industry) (Socialist competition)

GENKEN, I.

Volunteer labor organization office at the Novosibirsk Metallurgical Plant. Sots. trud 7 no.8:123-126 Ag '62.
(MIRA 15:10)

1. Nachal'nik otдела organizatsii truda Novosibirskogo metallurgicheskogo zavoda.

(~~Novosibirsk~~—Steel industry—Labor productivity)

GEN:II, .

specialization and cooperation of the Caspian shipyards. Mar. flot
(MIRA 18:8)
24 no.12:30-32 D '64.

1. Zamenitel' nachal'nika sluzhby sudoremontnykh zavodov
Kaspiyskogo parohodstva.

GOLOVNEV, S.; GENKIN, A.; LEVIN, Yo.; FLYGIN, D.

Use of infrared rays. Zhil. stroi. no.9:28 '65.
(MIRA 18:11)

27.5000

S/044/62/000/007/092/100
C111/C333

AUTHORS: Bodrov, V. A., Genkin, A. A., Zarakovskiy, G. M.

TITLE: Some rules in the reaction of humans to text problems which model the difference between two possible solutions. Report I. The dependence of the error frequency upon the complexity and the probability of the signal

PERIODICAL: Referativnyy zhurnal, Matematika, no. 7, 1962, 78-79, abstract 7V384. ("Dokl. Akad. ped. nauk RSFSR", 1961, no.5,77-80)

TEXT: The results of the following experiments are described: The test person must answer as quickly as possible with "yes" or "no" to the question whether the number given him orally is divisible by three. Fifteen test persons were told a total of 6286 numbers. It was found: The probability of the error is larger if the less probable signal (a number divisible by three) was given; the probability of the error grows in general with the complexity of the number (number of digits). The influence of the previous signal on the error probability is discussed.

[Abstracter's note: Complete translation.]

Card 1/1

274000

3/644/62/005/006/122/127
B160/B102

AUTHOR: Genkin, A. A.

TITLE: Revelation of a specific local reaction of the brain in an electroencephalogram during complex activity

PERIODICAL: Referativnyy zhurnal. Matematika, no. 6, 1962, 78-79, abstract 6V430 (Vopr. psikhologii, no. 6, 1961, 114-126)

TEXT: The correlations between the three channels of electroencephalograms are studied. Three bipolar electrodes are fitted above the left cerebral hemisphere (in the Brodman fields 39, 37, and 18) and are switched so that any two of the three electroencephalogram channels have a common electrode (Jasper circuit). The electroencephalogram pairs are processed by the formula

$$\rho = \frac{\sum x_i y_i}{\sqrt{\sum x_i^2 \sum y_i^2}}$$

Card 1/3